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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,750	08/18/2003	Wayne M. Struble	TRQ-00002	4139
22888	7590	01/12/2006	EXAMINER	
BEVER HOFFMAN & HARMS, LLP TRI-VALLEY OFFICE 1432 CONCANNON BLVD., BLDG. G LIVERMORE, CA 94550			VO, NGUYEN THANH	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/643,750	Applicant(s) STRUBLE, WAYNE M.	
	Examiner Nguyen T. Vo	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 6 and 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

2. Claims 11-14 are objected to because of the following informalities: in claims 11-14, the recitation "diode element" should be changed to --diode--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 14, the recitation "the second diode" lacks clear antecedent basis. It is suggested that claim 14 should depend on claim 4 instead of claim 3.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 7, 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Zametzer (5,220,679, cited by examiner).

As to claims 1, 16, Zametzer discloses in figure 2 a switch system comprising a radio frequency switch element 8 configured to receive a radio frequency (RF) input signal (see column 3 lines 51-59); a first voltage supply terminal configured to receive a first DC supply voltage (see the reference potential which is ground in figure 2); a boost circuit 16 configured to receive the RF input signal and the first DC supply voltage and in response, provide a bias voltage for controlling the switch element (see the controller 22). See column 5 line 34 to column 6 line 24.

As to claim 2, Zametzer discloses a first capacitor C4, a rectifier circuit as claimed (see numerals V3-V4, C5, R3).

As to claim 3, Zametzer discloses a first diode V3 and a first resistor R3 as claimed.

As to claim 4, Zametzer discloses a second diode V4 and a second resistor R1 as claimed.

As to claims 5, 7, see capacitor C5. See also C6 in figure 1.

As to claims 11-12, see the connection of diode V3 and C4 in figure 2.

As to claims 13-14, see the connection of diode V3 and C4 and connection of diode V4 and R1 in figure 2.

As to claim 15, see the reference potential which is ground in figure 2 of Zametzer.

As to claims 17-18, first of all, Zametzer does disclose a first capacitor C4 and a second capacitor (see C5-C8) and a first DC supply voltage (see the ground potential in figure 2). In addition, since the basis function of the capacitors Zametzer is charging and discharging, Zametzer discloses the claimed limitations.

As to claim 19, first of all, Zametzer does disclose a second capacitor (see C5-C8) and a second DC supply voltage (see terminal 20 in figure 2 which receives voltage UDC/3). In addition, since the basis function of the capacitors Zametzer is charging and discharging, Zametzer discloses the claimed limitations.

As to claim 20, Zametzer discloses the claimed limitation because the output 17 UDC in figure 2 which is greater than the ground potential.

7. Claims 1-3, 11, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by the Article "A GaAs High-Power RF single-Pole Double-Throw Switch IC for Digital Mobile Communication System of Miyatsuji (as submitted by applicant; hereinafter simply referred to as Miyatsuji).

As to claims 1, 16, Miyatsuji discloses in figure 2 a switch system comprising a radio frequency switch element (see FET1 and FET2) configured to receive a radio frequency (RFin) input signal; a first voltage supply terminal configured to receive a first DC supply voltage (see the control input A which is a control voltage); a boost circuit (see Cf, R1 and diode) configured to receive the RF input signal and the first DC supply voltage and in response, provide a bias voltage for controlling the switch element.

As to claim 2, Miyatsuji discloses a first capacitor Cf, a rectifier circuit as claimed (see R1 and diode).

As to claims 3, 11, Zametzer discloses a first diode and a first resistor R1 as claimed.

***Allowable Subject Matter***

8. Claims 6, 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 6, 8, the applied references fail to disclose or render obvious a first node and a third resistor as specified in the claim.

As to claim 9, the applied references fail to disclose or render obvious a second capacitor and a third resistor as specified in the claim.

As to claim 10, the applied references fail to disclose or render obvious a third resistor as specified in the claim.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Vo whose telephone number is (571) 272-7901. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen Vo

*Nguyen Vo*  
1-8-2006

**NGUYEN T. VO**  
**PRIMARY EXAMINER**